

Publication

Antiprotozoal selectivity of diimidazoline N-phenylbenzamides

JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)

ID 3396804

Author(s) Wang, Xiaofang; Dong, Yuxiang; Cal, Monica; Kaiser, Marcel; Wittlin, Sergio; Vennerstrom, Jonathan L

Author(s) at UniBasel [Kaiser, Marcel](#) ; [Wittlin, Sergio](#) ;

Year 2015

Title Antiprotozoal selectivity of diimidazoline N-phenylbenzamides

Journal ACS infectious diseases

Volume 1

Number 3

Pages / Article-Number 135-9

We discovered three diimidazolines with high antiplasmodial selectivity that had IC₅₀ values of 1.9-28 nM against cultured Plasmodium falciparum. We also identified a gem-dimethyl diimidazolines with high antitrypanosomal selectivity that had an IC₅₀ value of 26 nM against cultured Trypanosoma brucei rhodesiense. Two 2-imidazoline heterocycles in a para orientation on a N-phenylbenzamide or similar core structure were required for high antiprotozoal activity. Ring expansion of the imidazoline as well as heterocyclic variants with pK(a) values of < 7 all decreased activity significantly.

Publisher ACS Publications

ISSN/ISBN 2373-8227

edoc-URL <http://edoc.unibas.ch/41608/>

Full Text on edoc No;

Digital Object Identifier DOI 10.1021/id500034v

PubMed ID <http://www.ncbi.nlm.nih.gov/pubmed/27622464>

ISI-Number WOS:000368463300003

Document type (ISI) Journal Article